

WHAT IS CLAIMED IS:

1. A semiconductor device comprising:

a pair of substrates;

a display section composed of a plurality of picture elements;

a plurality of picture element electrodes provided to the respective picture elements on one of said paired substrates;

a plurality of gate bus wirings and a plurality of source bus wirings for driving the plurality of picture elements;

an inter-layer insulating film covering said gate bus wirings and said source bus wirings;

switching elements provided to the intersections of said gate bus wirings and said source bus wirings; and

a covered electrode provided on a portion of said source bus wiring outside said display section, said covered electrode being connected to said source bus wiring through a contact hole of said inter-layer insulating film.

2. The semiconductor device according to claim 1, wherein said covered electrode is made of the same material as said picture element electrode.

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3. The semiconductor device according to claim 1, wherein said inter-layer insulating film is a photosensitive acrylic resin.

4. The liquid crystal display device according to claim 1, wherein a counter electrode, which faces said covered electrode and said picture element electrode, is provided on the other substrate, and said covered electrode, counter electrode and liquid crystal layer form a capacity for holding electric charges written to said source bus wiring.

5. The semiconductor device according to claim 1, wherein point-at-a-time driving is performed.

6. The semiconductor device according to claim 1, wherein said switching elements are thin film transistors having polycrystal silicon.

7. The semiconductor device according to claim 1, wherein said covered electrode has a wider width than a width of said source bus wiring.

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8. The semiconductor device according to claim 1, further comprising a liquid crystal layer sandwiched between said pair of substrates.

9. A semiconductor device comprising:

a plurality of scanning lines;

a plurality of signal lines arranged to cross said scanning lines;

a switching element provided at an intersection of one of said scanning lines and one of said signal lines;

an inter-layer insulating film made of an organic material formed above said scanning lines, said signal lines and said switching element;

a picture element electrode formed above said inter-layer insulating film; and

an additional capacity common wiring for holding a video signal, an additional capacity section being formed between said picture element electrode and said additional capacity common wiring, said additional capacity common wiring being formed above said inter-layer insulating film.

10. The semiconductor device according to claim 9, wherein said additional capacity common wiring is provided at least in a position where said additional capacity common wiring overlaps said switching element.

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11. The semiconductor device according to claim 10, wherein said additional capacity common wiring covers at least a PN junction in the switching element and functions as a light shielding film.

12. The semiconductor device according to claim 9, wherein said additional capacity common wiring is provided in a position where said additional capacity common wiring overlaps at least said scanning lines or said signal lines.

13. The semiconductor device according to claim 9, wherein said additional capacity common wiring is made of the same material as a metal for obtaining ohmic contact of a drain electrode of said switching element with the picture element electrode.

14. The semiconductor device according to claim 9, wherein said scanning lines and said signal lines are formed on one of paired substrates and a counter substrate which is the other one of paired substrates does not have a black matrix.

15. The semiconductor device according to claim 9, wherein the dielectric constant of an insulating film used as a dielectric of the additional capacity

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section is larger than the dielectric constant of the organic material of said inter-layer insulating film.

16. The semiconductor device according to claim 15, wherein the dielectric of the additional capacity is made of an anodic oxide film.

17. A semiconductor device comprising:

a non-monocrystal silicon thin film, a gate insulating film, and a gate bus wiring provided on one of paired substrates in this order;

a first inter-layer insulating film made of an organic material laminated above said gate bus wiring; and

a source bus wiring, a second inter-layer insulating film, and a picture element electrode provided above said first inter-layer insulating film in this order.

18. A semiconductor device, comprising:

a thin film transistor including a semiconductor layer, a gate insulating layer, and a gate electrode;

a first inter-layer insulating film provided above the thin film transistor;

a source electrode and a piling electrode provided above the first inter-layer insulating film;

a second inter-layer insulating film provided

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above the piling electrode;

a picture element electrode provided above the second inter-layer insulating film; and

an additional capacity for holding electrode charges of the picture element electrode provided between the first and second inter-layer insulating films;

wherein the piling electrode electrically connects the semiconductor layer of the thin film transistor and the picture element electrode and the piling electrode extends in a direction of a thickness of said first inter-layer film, and

wherein the additional capacity includes a first electrode, a second electrode, and an inorganic insulating film provided between the first and second electrodes, the first electrode is the piling electrode, and the inorganic insulating film has a greater dielectric constant than at least one of the first and second inter-layer insulating films.

19. A semiconductor device comprising:

a substrate;

a picture element electrode provided on said substrate;

a thin film transistor for driving said picture element electrode, provided on said substrate; and
a conductive light shielding layer provided above

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said thin film transistor and below said picture
element electrode,

wherein said conductive light shielding layer is
provided on a flattened layer.

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